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<p>(21) International Application Number: <b>PCT/US96/05638</b> (22) International Filing Date: <b>19 April 1996 (19.04.96)</b>  (30) Priority Data: 08/425,180 20 April 1995 (20.04.95) US</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p>	
<p>(71) Applicant: CHIRON VIAGENE, INC. [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US). (72) Inventor: JOLLY, Douglas, J.; 277 Hillcrest Drive, Leucadia, CA 92024 (US). (74) Agents: KRUSE, Norman, J. et al.; Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA 94662-8097 (US).</p>		<p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: <b>12 December 1996 (12.12.96)</b></p>	
<p>(54) Title: <b>HIGH EFFICIENCY EX VIVO TRANSDUCTION OF CELLS BY HIGH TITER RECOMBINANT RETROVIRAL PREPARATIONS</b></p> <p>(57) Abstract</p> <p>Compositions and methods for the efficient <i>ex vivo</i> introduction of nucleic acid into T cells, non-dividing cells, and cells resistant to standard transduction techniques mediated by high titer recombinant retroviral preparations is described. The recombinant vector constructs carried by the recombinant retrovirus particles code for the production of one or more desired gene products from one or more corresponding genes of interest, at least one of the gene products having a therapeutic application. Upon re-introduction into a patient, the transduced cells produce a desired gene product in an amount sufficient to treat a particular disease state.</p>			

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 96/05638

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 C12N15/86 C12N5/10 A61K48/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO,A,95 07358 (UNIVERSITY OF MEDICINE & DENTISTRY OF NEW JERSEY (US)) 16 March 1995 see the whole document. ---	1-34
X	WO,A,94 29438 (CELL GENESYS, INC. (US)) 22 December 1994 see the claims. ---	1-34
X	WO,A,94 22489 (TARGETED GENETICS CORPORATION (US)) 13 October 1994 see Examples 3-5 and the claims. ---	1-34

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SCIENCE, vol. 251, 1991, pages 1363-1366, XP000381747 G. FERRARI ET AL.: "An in vivo model of somatic cell gene therapy for human severe combined immunodeficiency" see the whole document. ---	1-34
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PCT/US 96/05638

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